# **ABSTRACTS**

NSW ENVIRONMENTAL EDUCATION CONFERENCE

9 - 11 October 2024

### **PRESENTED BY:**





### **CONFERENCE PARTNERS:**





### **MAJOR SPONSORS:**









### **Thursday Presentations and Workshops**

Session	Abstract
Facilitated Panel:	A discussion about each young person's journey with environmental
The Future is	education, how it has inspired them to pursue the course that they're on
Now	and/or what other influences have had a significant impact on their learning
	and career aspirations.
Keynote Panel:	Introduction Erika Van Schellebeck, EENSW Executive and Education &
Agriculture as a	Engagement at SoilCQuest 2031, BA Resource & Environmental Management,
Climate and	GradCert Regenerative Agriculture
Nature Repair	
Solution	Speaker 1 - Walter Batt
	Business Impact Director, Farmers for Climate Action
	'The challenges and opportunities for Australian farmers'
	How are Australian farmers facing the daily challenge of climate change, and
	what are the global and national climate policies shaping their businesses and
	providing challenges and opportunities to slow down climate change and
	repair our climate.
	Speaker 2 - Mark Caddey
	Senior Project Officer – Net Zero Land, NSW Department of Climate Change,
	Energy, the Environment and Water (DCCEEW).
	'Land Management and climate- the NSW Government's Primary Industries
	Productivity & Abatement Program (PIPAP)'
	Funded by the NSW Government's Net Zero Plan, this program is supporting
	farmers and land managers to abate and sequester carbon, improve their
	carbon management, and enhance biodiversity on their land alongside
	production.
	Control to Plate or
	Speaker 3 - Jen Ringbauer
	Holistic Management and permaculture educator, student B. Science with
	Honours (Regenerative Agriculture)  'Regenerative Agriculture and ruminants'
	What is regenerative agriculture and how does it increase soil carbon and
	biodiversity, improve the health of plants, animals and our food, and the
	health and resilience of farming communities.
	reduct and resilience of farming communities.
	Speaker 4 - Carolyn Hall
	CEO The Mulloon Institute
	'Landscape rehydration supporting farmers to repair catchments and
	landscapes'
	The Mulloon Institute's catchment scale rehydration and restoration research
	is recognised globally as a part of the UN Sustainable Development Solutions
	Network and works with land managers around Australia to strategically
	improve water cycling and manage climate risk.
	Speaker 5 - Guy Webb
	Co-founder and Global Head of Agronomy, Loam Bio
	'The fungi helping broad-acre agriculture become a climate solution'
	Backed by \$105 million of private and government climate investment, an
	Australian breakthrough discovery of a soil carbon-fixing fungi is enabling
	reliable soil carbon sequestration in cropping systems, a biotechnology
	solution from nature.
Sponsor Address:	In 2008, it was identified that the Albury landfill would be full by 2020. Facing
Halve Waste	the imminent closure of its regional landfill (4th largest in NSW), Albury joined

## Session Abstract • Methane gas capture system: See our technology for capturing

- methane from the landfill.

   The Goterra Site: Experience an autonomous waste management
- system that uses *insects* to process commercial food waste.
   New Construction and Demolition Material Recovery Facility (MRF): Get insights into our efforts to recover up to 80% of dry recyclables and divert materials from landfilling.
- **Solar Farm:** Be inspired by Australia's first solar farm built on a capped landfill site.

Whether you're a professional in the field or simply curious about innovative waste management practices, this tour offers valuable insights and inspiring developments in sustainability.

Participants will travel by bus to the AWMC and be guided throughout the site by a Halve Waste Educator, with Q&A sessions available during the tour.

#### Field Trip 3 – CSU Sustainable Community Garden and Campus Tour

The CSU Sustainable Community Garden is a community-based project that aims to grow organic vegetables, as well as educate and share knowledge on environmental and sustainability-based ideas. Getting food on our tables is the single greatest contributor of greenhouse gases; growing, transporting, storing, packing, cooking, and disposing of food is responsible for 30% of CO2 emissions. The CSU Sustainable Community Garden provides a space for local community members to connect with diverse groups of people to grow and share food. Anyone who is interested can be involved with helping in the garden. For this tour you will hear how this community-based project has evolved, how it is now run, learn how people from diverse ethnic background all work together for a common good, and see all the great work being done growing organic vegetables.

#### Field Trip 5 - Wirraminna

Established in 1995, Wirraminna is set on an old stock reserve and public watering place. This 4 hectare park has been developed and maintained by local volunteers. It now presents a model for local Landcare projects that aim to restore native vegetation and wetlands on farms to redress problems of declining biodiversity. The gardens and natural woodland contain many locally rare native shrubs, wildflowers and grasses which attract a range of animals such as native bees, frogs around the waterways, skinks, many bird species, possums and the threatened Squirrel Glider. In 2005 Wirraminna received financial support to construct a rammed earth building. This Discovery Centre is now used for school and community activities and provides display, teaching and storage resources for regional schools and the Wirraminna volunteers. Over 2000 primary school children visit Wirraminna annually, from schools throughout the region. It also provides a popular outing for clubs and organisations. The Centre is continually evolving and improving our story of the beauty and interest of our natural environment and how it can be protected and enhanced.

#### Field Trip 5 - Wolki Farm

Exploring a local regenerative farm, the Wolki Farm tour will offer an open and honest conversation about all things regenerative agriculture. They're an open book... Nothing's off-limits, but there are a few subjects that'll be definitely be covered:

- Regenerative agriculture
- Local production

Session	Abstract
	Drug-free production
	Species appropriate diets
	Improving animal welfare
	Increasing human health
	Profitable farming systems
	Be mindful that there's some walking involved Bring a hat drink hettle and an
	Be mindful that there's some walking involved. Bring a hat, drink bottle, and an open mind!
Phil Jones - The	This presentation will establish the role of economic growth on the
Steady State	environment and demonstrate the need for the steady state economy.
Economy as a	Features of the steady state economy will be considered, concepts such as the
Focus of	Circular Economy, the Doughnut Economy, Wellbeing economy will be
Environment	reviewed and the Sustainable Development Goals evaluated. Existing steps
Education	being made towards the steady state economy will be outlined. The issue of
	equity within and between countries will be considered. How the way in
	which the steady state economy could and should be managed in high schools
	will also be an element of this presentation. It will be argued that the steady
	state economy must be considered an important of part of environment
	education and its promotion an essential element of the work of AAEE.
Debbi Long - "I	This presentation takes a deep dive into a thriving circular economy in a NSW
don't want to	rural coastal community. With a housing supply already badly impacted by the
Take it to the Tip": Circular	2019-2020 bushfires, the influx of post-COVID city money has pushed house prices out of reach for many local families. In addition, the bushfires have had
Economy and	a profound impact on attitudes towards climate change and the environment.
Waste	Prior to 2019, more conservative elements in the community did not
Management in	necessarily see climate change as something that impacted them, or as
a coastal	something they should be concerned about. Those perceptions have shifted
community.	dramatically. One of the results of this is that sectors in the community that
	previously may have had little in common, are finding common ground.
	Demographics such as established settler families, with values of political
	conservatism and material frugality; First Nations mobs, with values of
	generosity to those in need, suspicion of institutions and a growing
	reclamation of identity; both politically conservative and socially progressive
	retirees with significant financial privilege; young families drawn by lifestyle and community values; a locally-oriented business community and a strong,
	established organic growers community come together in a number of ways
	to exchange, gift, repurpose and circulate material goods. These exchanges
	are facilitated by pro-active sustainability and waste-management practices of
	the local council, by the local Buy Nothing facebook group, and by a number
	of active, volunteer driven, not-for profit organisations. A unifying value in all
	of this is a shared ethic of 'keeping things out of landfill'. This presentation
	explores a wide variety of ways in which this ethic keeps goods circulating
	through the community.
Sue Burton -	Bring your one big idea about what CE education looks like. Is it a way of
Circular	working eg participatory action, community activation, or is it new topics,
Economy Education	or something not even thought of yet.
Speed Map	Come along and participate in a 15-minute speed map and be ready to
Speed Map	add your idea. Here's some questions to get you started.
	What does education for a circular economy look like?
	What does it try to do?
	How does it differ from waste education?
	What tools do educators already have that can assist innovation,
	community activation?
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Session	Abstract
Circular	ТВА
Economy -	
Return and Earn	
Erika Van	Did you know that soil is our most important natural carbon sink? Soil plays a
Schellebeck -	vital role in the global carbon cycle, storing around twice the amount of
Growing Soil	carbon than the atmosphere and three times that of vegetation. Small
Carbon	percentage changes in the soil organic carbon pool can significantly affect the
	global carbon cycle by changing the level of carbon dioxide in the atmosphere.
	With agricultural land accounting for 50% of our landmass, this means that
	our Aussie farmers have the potential to be climate heroes by adopting
	practices to build more soil carbon and keep it in the ground. The Drawdown
	Framework has analysed and modelled 100 climate solutions that exist today to reduce and sequester emissions. Their calculations estimate that by shifting
	agricultural practices, by 2050 the global agricultural industry could reduce
	emissions by up to 26 Gigatons of carbon dioxide equivalent (Gt-CO2-eq) and
	sequester up to 193 Gt-CO2-eq. For this carbon drawdown to help reverse
	climate change though, we also need emissions reduction. "Drawdown" is the
	term used to describe the future point in time when levels of greenhouse
	gases in the atmosphere stop climbing and start to steadily decline. We
	cannot reach Drawdown without simultaneously reducing emissions toward
	zero and supporting nature's carbon sinks to sequester or drawdown carbon
	from our atmosphere. In this presentation we will find out about the
	regenerative and climate-smart practices Australian broadacre farmers in
	cropping and grazing are adopting to protect and increase their soil carbon.
	We'll learn about why soil carbon is so important for soil health, crop yields,
	farm productivity, profitability and resilience, and unpack carbon markets,
	farm emissions and carbon projects. A group discussion will explore the hot topics surrounding soil carbon and agricultural emissions, and the challenges
	of supporting farmers to learn about, trial and adopt new practices.
Julie Armstrong -	"'Regenerative Agriculture is a rehabilitative approach to farming practices
Inspiring	that increases soil fertility, biodiversity, profitability, and the enhancement of
Curriculum	ecosystem processes." -Kate Spry This presentation explores three inspiring
Resources for	curriculum resources for teaching Sustainable and Regenerative Agriculture in
Teaching	schools, emphasising the importance of educating young people about
Sustainable and	ecological principles and practices. Join us to explore and share your
Regenerative	experiences of fostering understanding of sustainable and productive food
Agriculture in	systems that aim to improve soil health, biodiversity, and ecosystem
Schools'	resilience, while also aiming to mitigate climate change. 'The Soil Story- the
	Road to Regenerative Agriculture' curriculum educates young people about the cycling of matter, and the flow of energy among living and non-living parts
	of an ecosystem. It highlights the necessity for rebuilding healthy soil for
	achieving carbon balance. The 'Soil Story' aligns with the NSW and Australian
	curriculum and can be taught across all KLA's. Stayed tuned for the new Stage
	4, 5 and 6 Science, Agriculture and Geography sequel, 'The Regenerating
	Journey.' In the Cool.org's 'Love Food? Love Bees! Food Security and
	Sustainable Agriculture' curriculum, students investigate the roles of food
	producers, consumers, and communities. They evaluate sustainable
	agriculture practices, use geographical tools to analyse data, and develop
	digital content to map sustainable food systems and sustainable food futures
	This aligns with the Australian Curriculum across Year 9/10 Geography and
	Sustainability. 'Rachel's Farm' is an Australian case study that underscores the
	four pillar principles of Regenerative Agriculture through the narrative of
	Rachel's journey. This senior secondary teaching resource illustrates a
	generational shift in farming practices and the impactful role of women in this movement. This aligns with the Australian Curriculum across Geography,
	Biology, Agricultural Studies, and Earth and Environmental Science. These
	1 5.5.5511 (18) Contains Studies, and Earth and Environmental Science. These

Session	Abstract
	curriculum resources provide a robust framework for cultivating informed and
	proactive future stewards of sustainable and regenerative agricultural
	practices.
Jen Ringbauer -	Farms are under pressure to produce food and fibre for a growing global
Understanding	population whilst climate uncertainty puts risk on every decision to keep or
the Relationships	sell livestock or sow crops. Farmers are utilising multiple strategies to increase
Between Farm	the health of their soils, plants and animals to increase their capacity to
Management	continue to produce in climate extremes whilst concurrently having a positive
And Farm	impact on cleaning water, sequestering soil organic carbon and reducing their
Resilience in	ecological footprint. It is unclear which of these strategies are ultimately
Australia	leading to farm resilience. This project aims to find farm attributes that lead to
	farming resilience by examining literature and recent social rural
	benchmarking surveys to explore relationships between farm management
	and resilience. In order to respond to the question, "What are common farm
	management attributes contributing to the building of farm resilience in
	Australia?" this thesis will undertake: 1. A narrative style literature review to
	find potential and theoretical relationships between farm management and
	farmer attributes that influence farming resilience; 2. An examination of the
	large Soil CRC Social Benchmarking survey data set, from a multi-region and
	multi-year data set, in order to identify farm management practices relating to
	family farm resilience; 3. An exploration of relationships between identified
	farm management attributes and farm resilience, drawing on a detailed
	analysis of this big data set. This ongoing research will be useful in providing
	mechanisms to measure resilience at farm-scale, and an understanding of
	what needs to be implemented within a farm to create a resilient system.
	Findings will contribute to the longevity of family farming and food security.
	This research will offer farmers and policy makers another lens in which to
	view the benefits of these practices, and the which practices and balance of
	practices are most beneficial for increasing the resilience of a farming system.
Di Glover	
Address: Seeds	
of Change	
Nicole Maher -	Our project is both supporting and empowering local adolescents to address
Connecting	climate change impacts at a local level, and restore local biodiversity. We are
young people	providing high school students with the opportunity to take time to connect
with nature:	to nature, undertake experiential learning about climate change and
Benefits for	biodiversity, and experience a deep understanding of connection to Country
biodiversity,	through knowledge-sharing by Wiradjuri Elders. It is widely acknowledged
mental health	that time in nature can provide many benefits to young people, and can
and social	positively influence their mental health. However it has been found that
connection	adolescents typically spend far less time in nature than either younger
	children or adults. In parallel, emerging research has noted the conflicting
	impacts from the benefits of connecting with nature and the realisation that
	the natural world is under threat due to the impacts of climate change and
	other human-induced actions. This phenomenon, labelled "climate grief", can
	include anxiety over the future in terms of loss of nature, frustration over the
	lack of dedicated action from successive governments at an international
	scale, and fear that these problems are bigger than an individual can solve themselves. All of these emotions have a negative impact on the mental
	health of young people. Our project is creating a safe space where small
	groups of adolescents can spend time in nature to connect with the natural
	world and each other. These meetings also allow young people to make a
	positive contribution to the restoration and enhancement of remnant areas of
	native vegetation through plantings and other restoration works. Our team of
	environmental educators, Landcare volunteers, youth mental health services
	and members of the Wiradjuri community are providing the necessary
	and members of the wiradjuit community are providing the necessary

Session	Abstract
Cyrelle Field - Climate Change Education	combination of skills to engage the adolescents in work that creates positive change for the local environment, in a way that also empowers them and is self-directed. The participants provide guidance and decision-making around the direction of the project, with opportunities to focus on art, science, mindfulness, connection to Country and other areas of interest. The senior students involved will also have the opportunity to educate younger children about their learnings, helping to build their leadership and connections, and further spread the impact of the project.  Join us for an insightful session about the 2nd Climate Change Education Forum, held in May 2024, five years after its inaugural event. This forum was a collaborative effort between the Centre for Regenerating Futures,
Forum: the power of intergenerational connection	Sustainability Victoria, and the Victorian Department of Education, designed to foster inter-generational dialogue and learning. The event brought together 60 secondary students, 60 professionals, and 20 teachers, creating a unique opportunity to bridge gaps and explore future possibilities for Climate Change Education in Victoria together. Discover how this diverse group came together to share ideas, inspire one another, and pave the way for climate change futures.
Tanja Russell & Sharon Forwood - 'An existential rabbit-hole': Young people's perspectives on how they learn and feel about climate change, and implications for social change	Young people are disproportionately impacted by climate change, simultaneously facing futures beset by risk and uncertainty as well as the burden of implementing society's climate response in coming years.  Positioning young people as emerging climate leaders assumes that they are equipped to step into this role, having the cognitive knowledge, practical skills and emotional fortitude to face a complex array of challenges. However, Tanja's research shows that young Australians instead feel a range of distressing emotions about climate change, alongside a sense of being underprepared by the education system, and uncertainty about how to meaningfully contribute to climate mitigation and adaptation efforts. This presentation will highlight the findings from two studies investigating the educational and emotional experiences of young people in relation to climate change. The first study explores the perspectives of 18-24 year olds from different locations across Australia. The second, a Case Study, focuses on the experiences of students in Years 7-12 at a high school in Wagga Wagga, New South Wales, and discusses factors that impede or foster their sense of agency towards climate change.  In addition, the presentation will provide insights from the research partnership between Australian National University and Kildare Catholic College, the site of the Case Study. Sharon will discuss the critical role that schools play in building societal understanding of the issues associated with climate change and demonstrate the value of institutional support in raising environmental ambition and community engagement at Kildare – in this case, the partnership with ANU. The partnership has led to the development of a professional development program for educators that has been piloted in NSW and the ACT, and which seeks to build educators' capacity to navigate the complexities of teaching climate change in the classroom.  Understanding the intersections between what young people know, feel and do in relation to climate change –
Tanya Mottl - whole systems	support young people through this critical decade and foster a sense of agency - is fundamental to meeting the challenges of a climate-altered future.  Ecovillages have provided low impact solutions for decades. IPCC scientists state that what the world needs most is ecologically aware and socially
tools for participation and playful learning	innovative experimental communities that network with each other and provide educational outreach and positive examples of a better world. Tanya's 60 minute (keynote or workshop) session uses examples from Narara Ecovillage, just north of Sydney, how coop members collaborate towards

Session	Abstract
	projects that lower emissions, build climate efficient homes, and have a social
	process for brainstorming, meetings, conflict resolution and governance.
	Using the Map of Regeneration, a proven 4D whole systems regenerative
	framework, participants are able to take stock of their own personal situation,
	their family or community to determine what they have skills, energy and
	capacity to take local action. This is a taste of eco-tools that the ecovillage
	movement have developed over decades that can be used to engage, inspire
	and activate students. Tanya enjoys co-creation, interaction and building networks and this session will allow for participants to do just that! The
	objective: to feel greater clarity around what is individually possible,
	empowered to explore local solutions and to build community. To find
	direction that helps move from eco-anxiety to agency. A second 60 min
	session is around the 2030 SDGs cards - a tool for high school & university
	students using GAIA Education SDG Flashcards. These cards enable a
	participatory and problem-centric group conversation and solutions oriented
	multi-perspectival dialogue. They invite participants to engage and to
	collaborate to identify actions and solutions to implement the SDGs in ways
	that are relevant to their lives and communities, locally. This is an effective
	way to establish local community ownership and realisation for the UN
	Sustainable Development Goals. In a nutshell, the cards are an easy to use
	teaching tool that enables facilitators (multipliers) to take the conversations
	about SDG implementation into local schools, town halls, community groups,
Dani Fine -	NGOs, businesses, universities, etc  Nature Play for all: Empowering inclusive outdoor learning What we saw? At
Nature Play for	Greater Sydney Parklands our programs are generally aimed at 3 – 12 year
all: Empowering	old's and are increasingly being attended by those with diverse needs. We
inclusive outdoor	have seen an increase in anxiety, neurodivergences, ADHD, ASD, behavioural
learning	concerns, and sensory processing needs. Combined with the general
	heightened social needs in our post covid times of many children and youth,
	where being outside away from familiar situations is daunting for many.
	Moving forward Our educators required upskilling to meet these needs and
	ensure our programs were inclusive for the main concerns we were seeing. So
	we devised a professional learning course for our educators, and now offer it
	to teachers delivering outdoor programs. In this presentation we offer
	participants a selection of tools to add to their repertoires, think practical that
	can be put in place on return to your setting where you will gain knowledge
	and skills to establish and navigate inclusive outdoor experiences. The three
	main components include: • Establishing routines and schedules for inclusive outdoor engagement. • Creating a conducive outdoor environment for
	success. Exploring the educator's role and collaborative goal achievement
	outdoors. Emphasis in this workshop is placed on establishing core routines to
	meaningfully engage children in outdoor activities. The focus will be on how
	to provide scaffolding and support to children for successful outdoor learning.
	Suitable for anyone who works with any age group outdoors, the basic
	concepts are transferrable across all settings.

### **Friday Presentations and Workshops**

NSW Government	ТВА
Return and Earn	TBA
Keynote Address:	ТВА
Cathy McGowan	
Abbie Mitchell:	ReWild Your School is designed to apply purposeful, measurable and hands-
Rewild your	on solutions to enhance habitat connectivity in the school area. Each class
school	champions a different local animal as a case study for the program. Students

follow 10 Action's (i.e. lessons) with each individual lesson addressing a key inquiry question following the 5 E's framework supported by a dedicated workbook, videos and other digital resources. The lesson sequence builds a deep understanding of the needs and sustainability of the Champion Animal via strategic questions, research, habitat assessment, survey techniques, habitat creation, communication, and monitoring with sustainability in front of mind. Students will feel empowered as they create targeted habitat by planting native species and creating hands-on habitat projects for their Champion Animal and available space. Teachers are fully supported via a comprehensive teachers guide including a detailed sequence and examples. It is the hope of JGIA that this program will become the go-to for stage 3 geography and/or science curriculum. We realise that we are asking schools to make a switch from the current unit that they may have been teaching for many years. But in the face of continued environmental pressures, we have developed a program that both surpasses curriculum needs and a term long focus by giving children the ability to embed environmental sustainability in their future endeavours.

### Beth Healy: Dirt Mum Mind Body & Soil

DirtMum has developed a unique program 'Mind, Body and Soil' that incorporates nature play, gratitude, animal assisted learning, sustainability and wellbeing. This program includes activities designed to inspire young minds and supporting their mental health through practical life skills and give them hope for the future. The program is inspired and grown from my experiences with mental health and successful strategies used personally at home and professionally. The lessons are planned to explore new textures, flavours through fruit and vegetables and to learn about importance of nutrition through growing and cooking with seasonal food. The garden to plate approach shows the cycle through the seasons. The program teaches the children, families and staff more than just the basic gardening skills, compost and recycling. It is about connection, being mindful of ourselves, others and our environment. The children learn about gratitude, slowing down, developing their observation and journaling skills, planting a garden for others to enjoy, resilience and appreciating the blessings from the garden grown in the previous season. Mental health is declining, especially since the pandemic. From food shortages to natural disasters, negativity and trauma has impacted our lives. The unique animal assisted learning program is used to build trust and relationships, fostering connections with others, reducing anxiety, improving social skills, regulations a sense of purpose and increase wellbeing. Participants walk away with a sense of joy, peace, excitement and hope. Children are less anxious, more grounded and ready to learn. Staff are supported and empowered. I am continuing to learn, grow and blossom

### Kelly Coleman: Fun adventures at your place

During Covid lockdowns teachers were struggling to engage students when they were at home, and parents were struggling to keep their kids motivated and interested in any kind of learning activity. To meet this need, Hunter Local Land Services and PeeKdesigns came up with a concept to get kids outside, in their backyards and exploring their local environment. The Adventures at Your Place website was born. Adventures at Your Place houses a series of fun, educational activities that can be used by parents and teachers with their kids, our future land managers. The activities may involve kids researching, observing, experimenting and collecting things that help them discover and learn about their piece of the landscape puzzle. These activities range from learning about plants and pollinators, to soils and creepy crawlies, waterbugs and the riparian zone, threatened species and feral animals. The site also hosts a gallery of photos that teachers and parents have submitted of artworks created by their kids. Since the launch of Adventures at Your Place in 2020, the website has become a home for a variety of teaching resources and fun interactive activities created in partnership with Hunter Local Land Services and PeeKdesigns. These include:

## • Catchment Crusader Game – interactive online game • Who's living in my school – teacher's resource

- Biodiversity blitz fun activities for Biodiversity Month (September)
- National Water Week fun activities (October)
- Wollombi Catchment eDNA project Platypus and Rakali activities
- Adventures at Your Place activity series activities for the home or school. During our presentation we will take you on a journey through some of these resources to see how they can be applied to your teaching environment.

### Kylie Walker: Carbon on Country

Carbon on Country will explore meaningful ways of working in partnership with NSW Aboriginal Community Controlled Organisations to implement environmental planting projects that deliver cultural and community outcomes alongside carbon abatement. The presentation will discuss ways in which open-ended co-design frameworks can be utilised as an alternative 2-way learning & implementation process rather than more transactional grant processes. An overview of different project models and what the current ACCU scheme means for First Nations participation in NSW will be covered, as well as practical ways to apply and embed the principles of Free Prior and Informed Consent and protection of Indigenous Cultural and Intellectual Property to all participatory projects.

Local Success Story: Squirrel Glider Local Area Management Plan Project Paula Sheehan is a Local Landcare Coordinator based in Albury, employed through West Hume Landcare. She supports local groups such as Woolshed Thurgoona Landcare and Bungowannah/Splitters Creek Landcare, Petaurus Education Group and Friends of Nail Can Hill, along with other community organisations focused on engagement, nature, and land management. She enjoys connecting people with local wildlife and the environment through community programs on both public and private land. Paula has a Bachelor of Forest Science from the University of Melbourne and over 30 years of experience in Natural Resource Management across Victoria, Tasmania, and New South Wales.

Sally Eriksen - The Journey of Growing Sustainability Education in Kuring-gai My presentation will describe my 3-year journey of developing sustainability education programs in schools and early learning settings in Ku-ring-gai Council LGA. It was a tough gig to start with and it took some time to develop relationships with schools and early learning settings. Schools are such busy places and until now there has been very little focus on sustainability education in Ku-ring-gai. I was tasked with changing this mindset. This hurdle was managed largely through collaboration with my colleagues, as well as building partnerships with trusted groups and individuals to deliver sustainability programs. But first, I had to find out what schools needed, what sparked an interest and how to communicate effectively with busy educators. I soon learned that getting Principals on board was critical to obtaining a commitment to sustainability education. ACARA's Cross-Curriculum Priority and DET documents have helped Principals to realise the significance of including sustainability routines into daily school life. By demonstrating the benefits to the school and how programs can be integrated into the existing curriculum, and maintained, schools gradually came onboard. From here, I began engaging students in fun competitions to raise awareness of their local environment and the effects of Climate Change. I empowered high school students by giving them an opportunity to voice their views and showcase their achievements within the broader community. In addition, I have enabled teachers through regular professional development opportunities. I have become very cognizant to connecting curriculum to real sustainability outcomes. I have created and developed several programs that are running successfully at local schools.

- Why Waste It? A curriculum-linked plastics upcycling program
- Nest Box program: A curriculum-linked species survival program
- Killior'ra Tree Trail program: A curriculum-linked urban forest program

- Wild With Words Poetry competition: Engaging primary students
- Speaking 4 the Planet 'Trees: Guardians of Life' competition: Engaging high school students
- Composting Professional Development Day for school teachers Other programs will also be described. The presentation will culminate with the benefits to students, families, staff, the wider community and future generations.

Jessica Menendez and Ben Howes -Embrace the Wild: Active Hope Partnerships are an important part of conservation education, evaluation, and social research. Organisations and institutions can share expertise, resources and insights which can lead to increased capability to deliver effective conservation education. Sydney Zoo Education and Jane Goodall Institute Australia developed a leadership and advocacy program with intensive units across a 10-month period at Sydney Zoo. The first aim is to provide access to environmental leadership for students of western Sydney that typically have less opportunities due to distance, cost and other disadvantages. The second is to provide hope to young people that are passionate about the environment and are witnessing the changing climate, biodiversity loss and other threats facing our planet, people and wildlife today. In the pilot year in 2023, participants engaged with Australian Indigenous knowledge, explored issues facing diverse species, and conservation action that helps address these issues. They also learned new leadership skills. The zoo provides participants with access to inspirational wildlife, staff and expertise in one location. In 2024 the program expanded in numbers and within the program - an embrace the wild project is being undertaken by each participant as we explore what they are passionate about, and how they can act for change in their individual contexts. Sydney Zoo and Roots and Shoots provide support, knowledge and a seed grant for each project. The program format was considered very successful due to high attendance levels, participants returning to mentor on the new program in 2024 and the exit survey showed positive engagement with self-reported increases in confidence, advocacy, and leadership skills. We wish to share in our success and discuss our new partnership, why partnerships can be beneficial and the benefits we're seeing in our youth leaders over the past 2 years - inspiring active hope and how we're designing/redesigning our learning for change.

Wendy Harper Inner
Development
Goals: Sustaining
Outer World
Change through
Inner
Development

In today's rapidly changing world, the intersection of environmental education and personal development is critical for fostering a sustainable future. This presentation explores the synergy between the Inner Development Goals (IDGs) framework and environmental education, emphasizing how cultivating inner capacities can enhance wellbeing, resilience, and active hope in individuals and communities. Presentation Overview: This presentation will delve into the five dimensions of the IDG framework— Being, Thinking, Relating, Collaborating, and Acting—and their relevance to environmental education. By integrating these dimensions, educators can impart knowledge about environmental issues while nurturing the inner qualities necessary for individuals to thrive in the face of ecological challenges. Key Components: Being: Emphasizing mindfulness, selfawareness, and presence to cultivate a deep connection with nature. Techniques for fostering inner peace and emotional resilience amidst environmental stressors. Thinking: Encouraging critical thinking and reflective practices to understand complex ecological systems. Strategies for fostering creativity and innovation in addressing environmental problems. Relating: Building empathy and compassion for all living beings to promote a sense of global stewardship. Activities that strengthen interpersonal relationships and community bonds through shared environmental goals. Collaborating: Enhancing teamwork and co-creation skills to develop collective solutions for sustainability. Methods for facilitating inclusive and participatory approaches

in environmental projects. Acting: Inspiring proactive engagement and leadership in environmental advocacy. Empowering individuals to take meaningful actions that contribute to ecological restoration and conservation. Outcomes: Participants will gain practical insights and tools to incorporate the IDG framework into their environmental education programs. This integration will enable educators to foster holistic development, enhance resilience, and inspire active hope in their students, equipping them to navigate and address the environmental challenges of our time. Conclusion: By aligning the IDG framework with environmental education, we can create a transformative approach that nurtures both inner and outer sustainability. This presentation aims to inspire and equip educators with the knowledge and skills to cultivate a generation of environmentally conscious and resilient individuals.

### Caroline O'Brien -Climate Fresk - A Game Changer in Environmental Education

Climate Fresk is a fun, participative, science-based card game, grounded in the science of the IPCC (Intergovernmental Panel on Climate Change) Report. The Climate Fresk workshop is a unique, new approach to educating both teachers and students about climate change, and ways to take positive action, as outlined in the Climate Fresk overview. Rationale: Recent studies\*\* have outlined three areas needing urgent attention: • ways in which teaching climate change can be integrated into the school curriculum • the education of teachers • the emotional and psychological effects of learning about climate change Climate change education in schools must become more holistic and empowering, and children should be given more opportunities to shape the future they will inherit. Children are often seen as passive, marginal actors in the climate crisis. Young people report feeling unheard and betrayed by older generations when it comes to climate change. Analysis indicates students want to know how to contribute to solutions – either through their own actions or influencing adults, industries, and governments. The Climate Fresk addresses all these issues in a collaborative, informative and impactful way

### Lisa Siegel -Intentionally, Collectively, Actively Hoping: Teaching the Great Turning

Intentionally, collectively, actively hoping: teaching the Great Turning

Eco-philosopher and environmental elder Joanna Macy contends that much of our industrialised world is entrenched in what she calls the "Business as Usual" model (Macy & Brown, 2014, p. 5). This model bleeds into our societal and educational structures as well. At the same time, there are more signs than ever that humanity is waking up to the understanding that the "business as usual" is impossible.

Macy offers us an alternative: the "Great Turning", in which we work to "bring our lifestyles and consumption into harmony with the living systems of Earth" (Macy & Brown, 2014, p. 4). In order to facilitate the Great Turning, however, we need to recognise, encourage, and actively work in three dimensions of social/ecological action:

- 1. holding actions to stop immediate environmental damage,
- 2. structural transformations of society's commons (e.g. education, economics, food, energy supply); and
- 3. activities that promote shifts in consciousness and values (e.g. First Nations knowledges, anti-colonisation learning, health/wellness, spiritual traditions).

These three dimensions do not need to exist in isolation; rather, they complement and reinforce each other. We can engage in one at a time or a mixture of two or three at the same time.

This expanded understanding of pro-environmental behaviour can be useful in all sectors of environmental education and with all ages. In this conference

Karen Jones - Inspiring awe, wonder and pro- environmental behaviours	workshop, we will interactively explore how to use the concept and dimensions of the Great Turning to engage, excite, and empower students, colleagues, and community members of all ages by giving them powerful tools grounded in active hope.  "Awesome" is one of the most craved human experiences, and this presentation/ workshop will bring to life the science of awe and wonder and how you can prime your audiences for deeper learning. Learn how experiencing awe supports your audiences to be open to learning, connected to nature and engaged in pro-environmental behaviours. Enhance the educational experiences of your audiences through understanding: 1. How to define and identify awe especially: - The emotional duality of awe - The altering impact of an awe experience 2. The five purposes of awe aligned to the Inspired Learning for All Framework 3. How to plan for awe with emotional, cognitive and sensory experiences This research synthesis explored the scientific and pedagogical literature of emotional affect and was undertaken as part of Taronga Zoo and University of Sydney's Wildlife Conservation Education Masters. It has been developed as a compendium for the World Zoos and Aquarium Education Strategy and to be a resource for environmental educators round the world. "Awe is an emotional experience hard to describe, a fleeting moment that marvels the mind and reminds you that it is impossible to fully comprehend the vast mystery and majestic beauty that is the world you live in" (Azzopardi, 2020).
Sally Giblin - Interactive climate play	I'm a CoFounder of Be The Future, which creates interactive climate solutions experiences for children (1-12 years) in collaboration with primary schools, early learning centres and governments. I won the Highly Commended Prize for the NSW Emerging Leader in Environmental Education Award 2023, and NSW AAEE have recently written two letters of support for innovative upcoming collaborative projects. Our playful, optimistic, solutions-based approach spans three of your conference themes: Wellbeing and resilience, Designing learning for change and Active hope. I'd like to inspire other educators by sharing visual stories of our innovative, highly interactive work with children. Examples include: Primary schools - Sustainability incursions centered on climate solutions themes, including aweinspiring global solution journeys, interactive floor projector games and creating the future with piles of preloved Lego Early Learning Centres - Sustainability incursions centered on climate solutions themes, including interactive storytelling, interactive floor projector games, eco sensory play and take home/leave at centre activities Governments - Themed eco play sessions with 2-5 year olds at the Coal Loader Centre for Sustainability, with all items preloved, upcycled, from fallen nature or sustainably made, and a group activity to take home/enjoy in nature. I can provide a visual oral presentation - and can extend this to include interactive activities.
Shaping the Future - Educators Forum	This World Cafe round table is for conference participants to identify and share their burning issues, ideas for change and what they can give and receive to help shape environmental education in NSW. This forum includes an update from the EENSW Executive on the exciting projects underway to support environmental educators from all sectors.

### **Thursday Presentations and Workshops**

Session	Abstract
Facilitated Panel:	A discussion about each young person's journey with environmental
The Future is	education, how it has inspired them to pursue the course that they're on
Now	and/or what other influences have had a significant impact on their learning
	and career aspirations.
Keynote Panel: Agriculture as a Climate and	Introduction Erika Van Schellebeck, EENSW Executive and Education & Engagement at SoilCQuest 2031, BA Resource & Environmental Management, GradCert Regenerative Agriculture
Nature Repair Solution	Smarkey 1 Maltey Both
Solution	Speaker 1 - Walter Batt Business Impact Director, Farmers for Climate Action
	'The challenges and opportunities for Australian farmers'
	How are Australian farmers facing the daily challenge of climate change, and what are the global and national climate policies shaping their businesses and providing challenges and opportunities to slow down climate change and repair our climate.
	Speaker 2 - Mark Caddey
	Senior Project Officer – Net Zero Land, NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW).
	'Land Management and climate- the NSW Government's Primary Industries Productivity & Abatement Program (PIPAP)'
	Funded by the NSW Government's Net Zero Plan, this program is supporting farmers and land managers to abate and sequester carbon, improve their carbon management, and enhance biodiversity on their land alongside production.
	Speaker 3 - Jen Ringbauer
	Holistic Management and permaculture educator, student B. Science with Honours (Regenerative Agriculture)  'Regenerative Agriculture and ruminants'
	What is regenerative agriculture and how does it increase soil carbon and biodiversity, improve the health of plants, animals and our food, and the health and resilience of farming communities.
	Speaker 4 – Jono Forrest
	General Manager, The Mulloon Institute
	'Landscape rehydration supporting farmers to repair catchments and landscapes'
	The Mulloon Institute's catchment scale rehydration and restoration research is recognised globally as a part of the UN Sustainable Development Solutions Network and works with land managers around Australia to strategically improve water cycling and manage climate risk.
	Speaker 5 - Guy Webb
	Co-founder and Global Head of Agronomy, Loam Bio
	'The fungi helping broad-acre agriculture become a climate solution'
	Backed by \$105 million of private and government climate investment, an Australian breakthrough discovery of a soil carbon-fixing fungi is enabling reliable soil carbon sequestration in cropping systems, a biotechnology solution from nature.
Sponsor Address:	In 2008, it was identified that the Albury landfill would be full by 2020. Facing
Halve Waste	the imminent closure of its regional landfill (4th largest in NSW), Albury joined

## Session Abstract • Methane gas capture system: See our technology for capturing

methane from the landfill.

The Goterra Site: Experience an autonomous waste management

system that uses *insects* to process commercial food waste.

- New Construction and Demolition Material Recovery Facility (MRF): Get insights into our efforts to recover up to 80% of dry recyclables and divert materials from landfilling.
- **Solar Farm:** Be inspired by Australia's first solar farm built on a capped landfill site.

Whether you're a professional in the field or simply curious about innovative waste management practices, this tour offers valuable insights and inspiring developments in sustainability.

Participants will travel by bus to the AWMC and be guided throughout the site by a Halve Waste Educator, with Q&A sessions available during the tour.

#### Field Trip 3 – CSU Sustainable Community Garden and Campus Tour

The CSU Sustainable Community Garden is a community-based project that aims to grow organic vegetables, as well as educate and share knowledge on environmental and sustainability-based ideas. Getting food on our tables is the single greatest contributor of greenhouse gases; growing, transporting, storing, packing, cooking, and disposing of food is responsible for 30% of CO2 emissions. The CSU Sustainable Community Garden provides a space for local community members to connect with diverse groups of people to grow and share food. Anyone who is interested can be involved with helping in the garden. For this tour you will hear how this community-based project has evolved, how it is now run, learn how people from diverse ethnic background all work together for a common good, and see all the great work being done growing organic vegetables.

#### Field Trip 4 - Wirraminna

Established in 1995, Wirraminna is set on an old stock reserve and public watering place. This 4 hectare park has been developed and maintained by local volunteers. It now presents a model for local Landcare projects that aim to restore native vegetation and wetlands on farms to redress problems of declining biodiversity. The gardens and natural woodland contain many locally rare native shrubs, wildflowers and grasses which attract a range of animals such as native bees, frogs around the waterways, skinks, many bird species, possums and the threatened Squirrel Glider. In 2005 Wirraminna received financial support to construct a rammed earth building. This Discovery Centre is now used for school and community activities and provides display, teaching and storage resources for regional schools and the Wirraminna volunteers. Over 2000 primary school children visit Wirraminna annually, from schools throughout the region. It also provides a popular outing for clubs and organisations. The Centre is continually evolving and improving our story of the beauty and interest of our natural environment and how it can be protected and enhanced.

#### Field Trip 5 - Wolki Farm

Exploring a local regenerative farm, the Wolki Farm tour will offer an open and honest conversation about all things regenerative agriculture. They're an open book... Nothing's off-limits, but there are a few subjects that'll be definitely be covered:

- Regenerative agriculture
- Local production

Session	Abstract
	Drug-free production
	Species appropriate diets
	Improving animal welfare
	Increasing human health
	Profitable farming systems
	Be mindful that there's some walking involved Bring a hat drink hettle and an
	Be mindful that there's some walking involved. Bring a hat, drink bottle, and an open mind!
Phil Jones - The	This presentation will establish the role of economic growth on the
Steady State	environment and demonstrate the need for the steady state economy.
Economy as a	Features of the steady state economy will be considered, concepts such as the
Focus of	Circular Economy, the Doughnut Economy, Wellbeing economy will be
Environment	reviewed and the Sustainable Development Goals evaluated. Existing steps
Education	being made towards the steady state economy will be outlined. The issue of
	equity within and between countries will be considered. How the way in
	which the steady state economy could and should be managed in high schools
	will also be an element of this presentation. It will be argued that the steady
	state economy must be considered an important of part of environment
	education and its promotion an essential element of the work of AAEE.
Debbi Long - "I	This presentation takes a deep dive into a thriving circular economy in a NSW
don't want to	rural coastal community. With a housing supply already badly impacted by the
Take it to the Tip": Circular	2019-2020 bushfires, the influx of post-COVID city money has pushed house prices out of reach for many local families. In addition, the bushfires have had
Economy and	a profound impact on attitudes towards climate change and the environment.
Waste	Prior to 2019, more conservative elements in the community did not
Management in	necessarily see climate change as something that impacted them, or as
a coastal	something they should be concerned about. Those perceptions have shifted
community.	dramatically. One of the results of this is that sectors in the community that
	previously may have had little in common, are finding common ground.
	Demographics such as established settler families, with values of political
	conservatism and material frugality; First Nations mobs, with values of
	generosity to those in need, suspicion of institutions and a growing
	reclamation of identity; both politically conservative and socially progressive
	retirees with significant financial privilege; young families drawn by lifestyle and community values; a locally-oriented business community and a strong,
	established organic growers community come together in a number of ways
	to exchange, gift, repurpose and circulate material goods. These exchanges
	are facilitated by pro-active sustainability and waste-management practices of
	the local council, by the local Buy Nothing facebook group, and by a number
	of active, volunteer driven, not-for profit organisations. A unifying value in all
	of this is a shared ethic of 'keeping things out of landfill'. This presentation
	explores a wide variety of ways in which this ethic keeps goods circulating
	through the community.
Sue Burton -	Bring your one big idea about what CE education looks like. Is it a way of
Circular	working eg participatory action, community activation, or is it new topics,
Economy	or something not even thought of yet.
Education Speed Map	Come along and participate in a 15-minute speed map and be ready to
Specu Map	add your idea. Here's some questions to get you started.
	What does education for a circular economy look like?
	What does it try to do?
	How does it differ from waste education?
	What tools do educators already have that can assist innovation,
	community activation?
	- Sommanity additions

Session	Abstract
Return and	The NSW container deposit scheme, Return and Earn, is part of a long-
Earn – helping	term solution to managing recyclable material and widely recognised as
schools	contributing to a growing circular economy in Australia.
contribute to	In six short years, the scheme has achieved phenomenal environmental
the NSW	outcomes and significant behaviour change, with 84 per cent of NSW
circular	having participated, over 12 billion bottles and cans returned by the
economy	community and more than 1 million tonnes of materials recycled since the
	scheme began.
	In this presentation, Exchange for Change Executive Director of
	Communications, Marketing and Engagement, Shirani Glover, will detail
	the significant circular outcomes Return and Earn has achieved including
	the important role Albury has to play in the journey of a bottle through the
	scheme.
	Using inspiring case studies, Shirani will highlight how schools can use Return and Earn as a tangible way to engage students and the broader
	school community, about the circular economy in NSW. She'll also use
	lifecycle analysis research to show how schools can contribute and
	importantly measure their contribution to the circular economy and the
	UN Sustainable Development Goals (SDGs).
Erika Van	Did you know that soil is our most important natural carbon sink? Soil plays a
Schellebeck -	vital role in the global carbon cycle, storing around twice the amount of
Growing Soil	carbon than the atmosphere and three times that of vegetation. Small
Carbon	percentage changes in the soil organic carbon pool can significantly affect the
	global carbon cycle by changing the level of carbon dioxide in the atmosphere.
	With agricultural land accounting for 50% of our landmass, this means that
	our Aussie farmers have the potential to be climate heroes by adopting
	practices to build more soil carbon and keep it in the ground. The Drawdown
	Framework has analysed and modelled 100 climate solutions that exist today
	to reduce and sequester emissions. Their calculations estimate that by shifting
	agricultural practices, by 2050 the global agricultural industry could reduce
	emissions by up to 26 Gigatons of carbon dioxide equivalent (Gt-CO2-eq) and
	sequester up to 193 Gt-CO2-eq. For this carbon drawdown to help reverse
	climate change though, we also need emissions reduction. "Drawdown" is the
	term used to describe the future point in time when levels of greenhouse gases in the atmosphere stop climbing and start to steadily decline. We
	cannot reach Drawdown without simultaneously reducing emissions toward
	zero and supporting nature's carbon sinks to sequester or drawdown carbon
	from our atmosphere. In this presentation we will find out about the
	regenerative and climate-smart practices Australian broadacre farmers in
	cropping and grazing are adopting to protect and increase their soil carbon.
	We'll learn about why soil carbon is so important for soil health, crop yields,
	farm productivity, profitability and resilience, and unpack carbon markets,
	farm emissions and carbon projects. A group discussion will explore the hot
	topics surrounding soil carbon and agricultural emissions, and the challenges
	of supporting farmers to learn about, trial and adopt new practices.
Julie Armstrong -	"Regenerative Agriculture is a rehabilitative approach to farming practices
Inspiring	that increases soil fertility, biodiversity, profitability, and the enhancement of
Curriculum	ecosystem processes." -Kate Spry This presentation explores three inspiring
Resources for	curriculum resources for teaching Sustainable and Regenerative Agriculture in
Teaching	schools, emphasising the importance of educating young people about
Sustainable and	ecological principles and practices. Join us to explore and share your
Regenerative Agriculture in	experiences of fostering understanding of sustainable and productive food systems that aim to improve soil health, biodiversity, and ecosystem
Schools'	resilience, while also aiming to mitigate climate change. 'The Soil Story- the
30110013	Road to Regenerative Agriculture' curriculum educates young people about
	the cycling of matter, and the flow of energy among living and non-living parts
	1 and 57 stands of matter, and the note of energy among haing and not haing parts

Session	Abstract
	of an ecosystem. It highlights the necessity for rebuilding healthy soil for achieving carbon balance. The 'Soil Story' aligns with the NSW and Australian curriculum and can be taught across all KLA's. Stayed tuned for the new Stage 4, 5 and 6 Science, Agriculture and Geography sequel, 'The Regenerating Journey.' In the Cool.org's 'Love Food? Love Bees! Food Security and Sustainable Agriculture' curriculum, students investigate the roles of food producers, consumers, and communities. They evaluate sustainable agriculture practices, use geographical tools to analyse data, and develop digital content to map sustainable food systems and sustainable food futures This aligns with the Australian Curriculum across Year 9/10 Geography and Sustainability. 'Rachel's Farm' is an Australian case study that underscores the four pillar principles of Regenerative Agriculture through the narrative of Rachel's journey. This senior secondary teaching resource illustrates a generational shift in farming practices and the impactful role of women in this movement. This aligns with the Australian Curriculum across Geography, Biology, Agricultural Studies, and Earth and Environmental Science. These curriculum resources provide a robust framework for cultivating informed and proactive future stewards of sustainable and regenerative agricultural practices.
Jen Ringbauer - Understanding the Relationships Between Farm Management And Farm Resilience in Australia	Farms are under pressure to produce food and fibre for a growing global population whilst climate uncertainty puts risk on every decision to keep or sell livestock or sow crops. Farmers are utilising multiple strategies to increase the health of their soils, plants and animals to increase their capacity to continue to produce in climate extremes whilst concurrently having a positive impact on cleaning water, sequestering soil organic carbon and reducing their ecological footprint. It is unclear which of these strategies are ultimately leading to farm resilience. This project aims to find farm attributes that lead to farming resilience by examining literature and recent social rural benchmarking surveys to explore relationships between farm management and resilience. In order to respond to the question, "What are common farm management attributes contributing to the building of farm resilience in Australia?" this thesis will undertake: 1. A narrative style literature review to find potential and theoretical relationships between farm management and farmer attributes that influence farming resilience; 2. An examination of the large Soil CRC Social Benchmarking survey data set, from a multi-region and multi-year data set, in order to identify farm management practices relating to family farm resilience; 3. An exploration of relationships between identified farm management attributes and farm resilience, drawing on a detailed analysis of this big data set. This ongoing research will be useful in providing mechanisms to measure resilience at farm-scale, and an understanding of what needs to be implemented within a farm to create a resilient system. Findings will contribute to the longevity of family farming and food security. This research will offer farmers and policy makers another lens in which to view the benefits of these practices, and the which practices and balance of practices are most beneficial for increasing the resilience of a farming system.
Di Glover Address: Seeds of Change	
Nicole Maher - Connecting young people with nature: Benefits for biodiversity, mental health	Our project is both supporting and empowering local adolescents to address climate change impacts at a local level, and restore local biodiversity. We are providing high school students with the opportunity to take time to connect to nature, undertake experiential learning about climate change and biodiversity, and experience a deep understanding of connection to Country through knowledge-sharing by Wiradjuri Elders. It is widely acknowledged that time in nature can provide many benefits to young people, and can positively influence their mental health. However it has been found that

Session	Abstract
Cyrelle Field - Climate Change Education Forum: the	adolescents typically spend far less time in nature than either younger children or adults. In parallel, emerging research has noted the conflicting impacts from the benefits of connecting with nature and the realisation that the natural world is under threat due to the impacts of climate change and other human-induced actions. This phenomenon, labelled "climate grief", can include anxiety over the future in terms of loss of nature, frustration over the lack of dedicated action from successive governments at an international scale, and fear that these problems are bigger than an individual can solve themselves. All of these emotions have a negative impact on the mental health of young people. Our project is creating a safe space where small groups of adolescents can spend time in nature to connect with the natural world and each other. These meetings also allow young people to make a positive contribution to the restoration and enhancement of remnant areas of native vegetation through plantings and other restoration works. Our team of environmental educators, Landcare volunteers, youth mental health services and members of the Wiradjuri community are providing the necessary combination of skills to engage the adolescents in work that creates positive change for the local environment, in a way that also empowers them and is self-directed. The participants provide guidance and decision-making around the direction of the project, with opportunities to focus on art, science, mindfulness, connection to Country and other areas of interest. The senior students involved will also have the opportunity to educate younger children about their learnings, helping to build their leadership and connections, and further spread the impact of the project.  Join us for an insightful session about the 2nd Climate Change Education Forum, held in May 2024, five years after its inaugural event. This forum was a collaborative effort between the Centre for Regenerating Futures, Sustainability Victoria, and the Victorian Department of E
Tania Duccell 0	futures.
Tanja Russell & Sharon Forwood - 'An existential rabbit-hole': Young people's perspectives on how they learn and feel about climate change, and implications for social change	Young people are disproportionately impacted by climate change, simultaneously facing futures beset by risk and uncertainty as well as the burden of implementing society's climate response in coming years. Positioning young people as emerging climate leaders assumes that they are equipped to step into this role, having the cognitive knowledge, practical skills and emotional fortitude to face a complex array of challenges. However, Tanja's research shows that young Australians instead feel a range of distressing emotions about climate change, alongside a sense of being underprepared by the education system, and uncertainty about how to meaningfully contribute to climate mitigation and adaptation efforts. This presentation will highlight the findings from two studies investigating the educational and emotional experiences of young people in relation to climate change. The first study explores the perspectives of 18-24 year olds from different locations across Australia. The second, a Case Study, focuses on the experiences of students in Years 7-12 at a high school in Wagga Wagga, New South Wales, and discusses factors that impede or foster their sense of agency towards climate change.
	partnership between Australian National University and Kildare Catholic College, the site of the Case Study. Sharon will discuss the critical role that schools play in building societal understanding of the issues associated with

Session	Abstract
	climate change and demonstrate the value of institutional support in raising
	environmental ambition and community engagement at Kildare – in this case,
	the partnership with ANU. The partnership has led to the development of a
	professional development program for educators that has been piloted in
	NSW and the ACT, and which seeks to build educators' capacity to navigate
	the complexities of teaching climate change in the classroom.
	Understanding the intersections between what young people know, feel and do in relation to climate change – and what is required of institutions to
	support young people through this critical decade and foster a sense of
	agency - is fundamental to meeting the challenges of a climate-altered future.
Tanya Mottl -	Ecovillages have provided low impact solutions for decades. IPCC scientists
whole systems	state that what the world needs most is ecologically aware and socially
tools for	innovative experimental communities that network with each other and
participation and	provide educational outreach and positive examples of a better world. Tanya's
playful learning	60 minute (keynote or workshop) session uses examples from Narara
	Ecovillage, just north of Sydney, how coop members collaborate towards
	projects that lower emissions, build climate efficient homes, and have a social
	process for brainstorming, meetings, conflict resolution and governance.
	Using the Map of Regeneration, a proven 4D whole systems regenerative
	framework, participants are able to take stock of their own personal situation,
	their family or community to determine what they have skills, energy and capacity to take local action. This is a taste of eco-tools that the ecovillage
	movement have developed over decades that can be used to engage, inspire
	and activate students. Tanya enjoys co-creation, interaction and building
	networks and this session will allow for participants to do just that! The
	objective: to feel greater clarity around what is individually possible,
	empowered to explore local solutions and to build community. To find
	direction that helps move from eco-anxiety to agency. A second 60 min
	session is around the 2030 SDGs cards - a tool for high school & university
	students using GAIA Education SDG Flashcards. These cards enable a
	participatory and problem-centric group conversation and solutions oriented
	multi-perspectival dialogue. They invite participants to engage and to
	collaborate to identify actions and solutions to implement the SDGs in ways
	that are relevant to their lives and communities, locally. This is an effective
	way to establish local community ownership and realisation for the UN
	Sustainable Development Goals. In a nutshell, the cards are an easy to use
	teaching tool that enables facilitators (multipliers) to take the conversations about SDG implementation into local schools, town halls, community groups,
	NGOs, businesses, universities, etc
Dani Fine -	Nature Play for all: Empowering inclusive outdoor learning What we saw? At
Nature Play for	Greater Sydney Parklands our programs are generally aimed at 3 – 12 year
all: Empowering	old's and are increasingly being attended by those with diverse needs. We
inclusive outdoor	have seen an increase in anxiety, neurodivergences, ADHD, ASD, behavioural
learning	concerns, and sensory processing needs. Combined with the general
	heightened social needs in our post covid times of many children and youth,
	where being outside away from familiar situations is daunting for many.
	Moving forward Our educators required upskilling to meet these needs and
	ensure our programs were inclusive for the main concerns we were seeing. So
	we devised a professional learning course for our educators, and now offer it
	to teachers delivering outdoor programs. In this presentation we offer participants a selection of tools to add to their repertoires, think practical that
	can be put in place on return to your setting where you will gain knowledge
	and skills to establish and navigate inclusive outdoor experiences. The three
	main components include: • Establishing routines and schedules for inclusive
	outdoor engagement. · Creating a conducive outdoor environment for
	success. · Exploring the educator's role and collaborative goal achievement

Session	Abstract
	outdoors. Emphasis in this workshop is placed on establishing core routines to
	meaningfully engage children in outdoor activities. The focus will be on how
	to provide scaffolding and support to children for successful outdoor learning.
	Suitable for anyone who works with any age group outdoors, the basic
	concepts are transferrable across all settings.

### **Friday Presentations and Workshops**

NSW Government	TBA
Return and Earn	TBA
Keynote Address:	TBA
Cathy McGowan	
Abbie Mitchell:	ReWild Your School is designed to apply purposeful, measurable and hands-
Rewild your	on solutions to enhance habitat connectivity in the school area. Each class
school	champions a different local animal as a case study for the program. Students follow 10 Action's (i.e. lessons) with each individual lesson addressing a key inquiry question following the 5 E's framework supported by a dedicated workbook, videos and other digital resources. The lesson sequence builds a deep understanding of the needs and sustainability of the Champion Animal via strategic questions, research, habitat assessment, survey techniques, habitat creation, communication, and monitoring with sustainability in front of mind. Students will feel empowered as they create targeted habitat by planting native species and creating hands-on habitat projects for their Champion Animal and available space. Teachers are fully supported via a comprehensive teachers guide including a detailed sequence and examples. It is the hope of JGIA that this program will become the go-to for stage 3 geography and/or science curriculum. We realise that we are asking schools to make a switch from the current unit that they may have been teaching for many years. But in the face of continued environmental pressures, we have developed a program that both surpasses curriculum needs and a term long focus by giving children the ability to embed environmental sustainability in their future endeavours.
Beth Healy: Dirt	DirtMum has developed a unique program 'Mind, Body and Soil' that
Mum Mind Body	incorporates nature play, gratitude, animal assisted learning, sustainability
& Soil	and wellbeing. This program includes activities designed to inspire young
	minds and supporting their mental health through practical life skills and give
	them hope for the future. The program is inspired and grown from my
	experiences with mental health and successful strategies used personally at
	home and professionally. The lessons are planned to explore new textures,
	flavours through fruit and vegetables and to learn about importance of
	nutrition through growing and cooking with seasonal food. The garden to
	plate approach shows the cycle through the seasons. The program teaches
	the children, families and staff more than just the basic gardening skills,
	compost and recycling. It is about connection, being mindful of ourselves,
	others and our environment. The children learn about gratitude, slowing down, developing their observation and journaling skills, planting a garden
	for others to enjoy, resilience and appreciating the blessings from the garden
	grown in the previous season. Mental health is declining, especially since the
	pandemic. From food shortages to natural disasters, negativity and trauma
	has impacted our lives. The unique animal assisted learning program is used
	to build trust and relationships, fostering connections with others, reducing
	anxiety, improving social skills, regulations a sense of purpose and increase
	wellbeing. Participants walk away with a sense of joy, peace, excitement and
	hope. Children are less anxious, more grounded and ready to learn. Staff are
	supported and empowered. I am continuing to learn, grow and blossom

### Kelly Coleman: Fun adventures at your place

During Covid lockdowns teachers were struggling to engage students when they were at home, and parents were struggling to keep their kids motivated and interested in any kind of learning activity. To meet this need, Hunter Local Land Services and PeeKdesigns came up with a concept to get kids outside, in their backyards and exploring their local environment. The Adventures at Your Place website was born. Adventures at Your Place houses a series of fun, educational activities that can be used by parents and teachers with their kids, our future land managers. The activities may involve kids researching, observing, experimenting and collecting things that help them discover and learn about their piece of the landscape puzzle. These activities range from learning about plants and pollinators, to soils and creepy crawlies, waterbugs and the riparian zone, threatened species and feral animals. The site also hosts a gallery of photos that teachers and parents have submitted of artworks created by their kids. Since the launch of Adventures at Your Place in 2020, the website has become a home for a variety of teaching resources and fun interactive activities created in partnership with Hunter Local Land Services and PeeKdesigns. These include:

- Catchment Crusader Game interactive online game Who's living in my school teacher's resource
- Biodiversity blitz fun activities for Biodiversity Month (September)
- National Water Week fun activities (October)
- Wollombi Catchment eDNA project Platypus and Rakali activities
- Adventures at Your Place activity series activities for the home or school. During our presentation we will take you on a journey through some of these resources to see how they can be applied to your teaching environment.

### Kylie Walker: Carbon on Country

Carbon on Country will explore meaningful ways of working in partnership with NSW Aboriginal Community Controlled Organisations to implement environmental planting projects that deliver cultural and community outcomes alongside carbon abatement. The presentation will discuss ways in which open-ended co-design frameworks can be utilised as an alternative 2-way learning & implementation process rather than more transactional grant processes. An overview of different project models and what the current ACCU scheme means for First Nations participation in NSW will be covered, as well as practical ways to apply and embed the principles of Free Prior and Informed Consent and protection of Indigenous Cultural and Intellectual Property to all participatory projects.

### Local Success Story: Squirrel Glider Local Area Management Plan Project

Paula Sheehan is a Local Landcare Coordinator based in Albury, employed through West Hume Landcare. She supports local groups such as Woolshed Thurgoona Landcare and Bungowannah/Splitters Creek Landcare, Petaurus Education Group and Friends of Nail Can Hill, along with other community organisations focused on engagement, nature, and land management. She enjoys connecting people with local wildlife and the environment through community programs on both public and private land. Paula has a Bachelor of Forest Science from the University of Melbourne and over 30 years of experience in Natural Resource Management across Victoria, Tasmania, and New South Wales.

### Sally Eriksen - The Journey of Growing Sustainability Education in Kuring-gai

My presentation will describe my 3-year journey of developing sustainability education programs in schools and early learning settings in Ku-ring-gai Council LGA. It was a tough gig to start with and it took some time to develop relationships with schools and early learning settings. Schools are such busy places and until now there has been very little focus on sustainability education in Ku-ring-gai. I was tasked with changing this mindset. This hurdle was managed largely through collaboration with my colleagues, as well as building partnerships with trusted groups and individuals to deliver sustainability programs. But first, I had to find out what schools needed, what sparked an interest and how to communicate effectively with busy educators.

I soon learned that getting Principals on board was critical to obtaining a commitment to sustainability education. ACARA's Cross-Curriculum Priority and DET documents have helped Principals to realise the significance of including sustainability routines into daily school life. By demonstrating the benefits to the school and how programs can be integrated into the existing curriculum, and maintained, schools gradually came onboard. From here, I began engaging students in fun competitions to raise awareness of their local environment and the effects of Climate Change. I empowered high school students by giving them an opportunity to voice their views and showcase their achievements within the broader community. In addition, I have enabled teachers through regular professional development opportunities. I have become very cognizant to connecting curriculum to real sustainability outcomes. I have created and developed several programs that are running successfully at local schools.

- Why Waste It? A curriculum-linked plastics upcycling program
- Nest Box program: A curriculum-linked species survival program
- Killior'ra Tree Trail program: A curriculum-linked urban forest program
- Wild With Words Poetry competition: Engaging primary students
- Speaking 4 the Planet 'Trees: Guardians of Life' competition: Engaging high school students
- Composting Professional Development Day for school teachers Other programs will also be described. The presentation will culminate with the benefits to students, families, staff, the wider community and future generations.

Jessica Menendez and Ben Howes -Embrace the Wild: Active Hope Partnerships are an important part of conservation education, evaluation, and social research. Organisations and institutions can share expertise, resources and insights which can lead to increased capability to deliver effective conservation education. Sydney Zoo Education and Jane Goodall Institute Australia developed a leadership and advocacy program with intensive units across a 10-month period at Sydney Zoo. The first aim is to provide access to environmental leadership for students of western Sydney that typically have less opportunities due to distance, cost and other disadvantages. The second is to provide hope to young people that are passionate about the environment and are witnessing the changing climate, biodiversity loss and other threats facing our planet, people and wildlife today. In the pilot year in 2023, participants engaged with Australian Indigenous knowledge, explored issues facing diverse species, and conservation action that helps address these issues. They also learned new leadership skills. The zoo provides participants with access to inspirational wildlife, staff and expertise in one location. In 2024 the program expanded in numbers and within the program - an embrace the wild project is being undertaken by each participant as we explore what they are passionate about, and how they can act for change in their individual contexts. Sydney Zoo and Roots and Shoots provide support, knowledge and a seed grant for each project. The program format was considered very successful due to high attendance levels, participants returning to mentor on the new program in 2024 and the exit survey showed positive engagement with self-reported increases in confidence, advocacy, and leadership skills. We wish to share in our success and discuss our new partnership, why partnerships can be beneficial and the benefits we're seeing in our youth leaders over the past 2 years – inspiring active hope and how we're designing/redesigning our learning for change.

Wendy Harper -Inner Development Goals: Sustaining Outer World In today's rapidly changing world, the intersection of environmental education and personal development is critical for fostering a sustainable future. This presentation explores the synergy between the Inner Development Goals (IDGs) framework and environmental education, emphasizing how cultivating inner capacities can enhance wellbeing,

### Change through Inner Development

resilience, and active hope in individuals and communities. Presentation Overview: This presentation will delve into the five dimensions of the IDG framework— Being, Thinking, Relating, Collaborating, and Acting—and their relevance to environmental education. By integrating these dimensions, educators can impart knowledge about environmental issues while nurturing the inner qualities necessary for individuals to thrive in the face of ecological challenges. Key Components: Being: Emphasizing mindfulness, selfawareness, and presence to cultivate a deep connection with nature. Techniques for fostering inner peace and emotional resilience amidst environmental stressors. Thinking: Encouraging critical thinking and reflective practices to understand complex ecological systems. Strategies for fostering creativity and innovation in addressing environmental problems. Relating: Building empathy and compassion for all living beings to promote a sense of global stewardship. Activities that strengthen interpersonal relationships and community bonds through shared environmental goals. Collaborating: Enhancing teamwork and co-creation skills to develop collective solutions for sustainability. Methods for facilitating inclusive and participatory approaches in environmental projects. Acting: Inspiring proactive engagement and leadership in environmental advocacy. Empowering individuals to take meaningful actions that contribute to ecological restoration and conservation. Outcomes: Participants will gain practical insights and tools to incorporate the IDG framework into their environmental education programs. This integration will enable educators to foster holistic development, enhance resilience, and inspire active hope in their students, equipping them to navigate and address the environmental challenges of our time. Conclusion: By aligning the IDG framework with environmental education, we can create a transformative approach that nurtures both inner and outer sustainability. This presentation aims to inspire and equip educators with the knowledge and skills to cultivate a generation of environmentally conscious and resilient individuals.

### Caroline O'Brien -Climate Fresk - A Game Changer in Environmental Education

Climate Fresk is a fun, participative, science-based card game, grounded in the science of the IPCC (Intergovernmental Panel on Climate Change) Report. The Climate Fresk workshop is a unique, new approach to educating both teachers and students about climate change, and ways to take positive action, as outlined in the Climate Fresk overview. Rationale: Recent studies\*\* have outlined three areas needing urgent attention: • ways in which teaching climate change can be integrated into the school curriculum • the education of teachers • the emotional and psychological effects of learning about climate change Climate change education in schools must become more holistic and empowering, and children should be given more opportunities to shape the future they will inherit. Children are often seen as passive, marginal actors in the climate crisis. Young people report feeling unheard and betrayed by older generations when it comes to climate change. Analysis indicates students want to know how to contribute to solutions – either through their own actions or influencing adults, industries, and governments. The Climate Fresk addresses all these issues in a collaborative, informative and impactful way

### Lisa Siegel -Intentionally, Collectively, Actively Hoping: Teaching the Great Turning

Intentionally, collectively, actively hoping: teaching the Great Turning

Eco-philosopher and environmental elder Joanna Macy contends that much of our industrialised world is entrenched in what she calls the "Business as Usual" model (Macy & Brown, 2014, p. 5). This model bleeds into our societal and educational structures as well. At the same time, there are more signs than ever that humanity is waking up to the understanding that the "business as usual" is impossible.

Macy offers us an alternative: the "Great Turning", in which we work to

"bring our lifestyles and consumption into harmony with the living systems of Earth" (Macy & Brown, 2014, p. 4). In order to facilitate the Great Turning, however, we need to recognise, encourage, and actively work in three dimensions of social/ecological action:

- 1. holding actions to stop immediate environmental damage,
- 2. structural transformations of society's commons (e.g. education, economics, food, energy supply); and
- 3. activities that promote shifts in consciousness and values (e.g. First Nations knowledges, anti-colonisation learning, health/wellness, spiritual traditions).

These three dimensions do not need to exist in isolation; rather, they complement and reinforce each other. We can engage in one at a time or a mixture of two or three at the same time.

This expanded understanding of pro-environmental behaviour can be useful in all sectors of environmental education and with all ages. In this conference workshop, we will interactively explore how to use the concept and dimensions of the Great Turning to engage, excite, and empower students, colleagues, and community members of all ages by giving them powerful tools grounded in active hope.

Karen Jones -Inspiring awe, wonder and proenvironmental behaviours "Awesome" is one of the most craved human experiences, and this presentation/ workshop will bring to life the science of awe and wonder and how you can prime your audiences for deeper learning. Learn how experiencing awe supports your audiences to be open to learning, connected to nature and engaged in pro-environmental behaviours. Enhance the educational experiences of your audiences through understanding: 1. How to define and identify awe especially: - The emotional duality of awe - The altering impact of an awe experience 2. The five purposes of awe aligned to the Inspired Learning for All Framework 3. How to plan for awe with emotional, cognitive and sensory experiences This research synthesis explored the scientific and pedagogical literature of emotional affect and was undertaken as part of Taronga Zoo and University of Sydney's Wildlife Conservation Education Masters. It has been developed as a compendium for the World Zoos and Aquarium Education Strategy and to be a resource for environmental educators round the world. "Awe is an emotional experience hard to describe, a fleeting moment that marvels the mind and reminds you that it is impossible to fully comprehend the vast mystery and majestic beauty that is the world you live in" (Azzopardi, 2020).

### Sally Giblin -Interactive climate play

I'm a CoFounder of Be The Future, which creates interactive climate solutions experiences for children (1-12 years) in collaboration with primary schools, early learning centres and governments. I won the Highly Commended Prize for the NSW Emerging Leader in Environmental Education Award 2023, and NSW AAEE have recently written two letters of support for innovative upcoming collaborative projects. Our playful, optimistic, solutions-based approach spans three of your conference themes: Wellbeing and resilience, Designing learning for change and Active hope. I'd like to inspire other educators by sharing visual stories of our innovative, highly interactive work with children. Examples include: Primary schools - Sustainability incursions centered on climate solutions themes, including aweinspiring global solution journeys, interactive floor projector games and creating the future with piles of preloved Lego Early Learning Centres - Sustainability incursions centered on climate solutions themes, including interactive storytelling, interactive floor projector games, eco sensory play and take home/leave at centre activities Governments - Themed eco play sessions with 2-5 year olds at the Coal Loader Centre for Sustainability, with all items preloved, upcycled, from

	fallen nature or sustainably made, and a group activity to take home/enjoy in
	nature. I can provide a visual oral presentation - and can extend this to
	include interactive activities.
Shaping the	This World Cafe round table is for conference participants to identify and
Future -	share their burning issues, ideas for change and what they can give and
Educators Forum	receive to help shape environmental education in NSW. This forum includes
	an update from the EENSW Executive on the exciting projects underway to
	support environmental educators from all sectors.